

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of : Tamas MAJOR et al.
Application No. : 10/035,360
Filed : December 28, 2001
Examiner : Melvin C. Marcelo
Art Unit : 2616
Title : NETWORK ELEMENT, AND ASSOCIATED METHOD, FOR
FACILITATING COMMUNICATION OF DATA BETWEEN
ELEMENT DEVICES

August 21, 2006

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

AMENDMENT

Sir:

Applicants gratefully acknowledge the Office Action dated April 20, 2006. It is respectfully requested that the application be amended as follows:

Amendments to the claims begin on page 2 of this Amendment.

Remarks/Arguments begin on page 7 of this Amendment.

Claims Amendment

Please amend the claims such that the pending claims read as follows:

1. (Currently Amendment) In a network element ~~having~~including a first elemental device and at least a second elemental device, the first and at least second elemental devices, respectively, connected together by a connector, an improvement of apparatus for facilitating communication of data, sourced at a first net entity, at least from the first elemental device to the second elemental device~~way of a network path and upon which at least selectably to communicate a payload data stream and a management data stream upon a common transport stream, an improvement of apparatus for the first elemental device, said apparatus comprising:~~

a frame encapsulator coupled to the first net entity to receive data to be communicated to the second elemental device, said frame encapsulator for frame-formatting the data into data frames, the data frames having a header portion and a data portion, the header portion selectably including a prefix structure, the prefix structure identifying the first net entity, the data frame, once formed, for communication upon the connector to the second elemental device;~~common transport stream-related frames; and~~

wherein the first elemental device comprises at least a first external port and wherein the first net entity is positioned external to the first elemental device and coupled to the first external port thereof, and wherein the prefix structure identifies the first external port to which the first data source is coupled; and

wherein the first elemental device comprises a Virtual LAN (local area network) processor and wherein said frame encapsulator is embodied at the Virtual LAN processor.~~a communicator coupled to said encapsulator to receive the common transport stream related to frames, said communicator utilizing single device-specific MAC (Medium Access Control) addresses for addressing and thereafter transporting the common transport stream-related frames upon the network path.~~

2. (Canceled)

3. (Canceled)

4. (Canceled)

5. (Currently Amended) The apparatus of claim 3-1 wherein the prefix structure included as part of the header portion selectably formed by said frame encapsulator comprises a VLAN (Virtual Local Area Network) Identifier (VID).

6. (Original) The apparatus of claim 5 wherein the prefix structure is of a length corresponding a VID field defined pursuant to an IEEE 802.1Q standard, and wherein the VID comprises an IEEE 802.1Q-defined VID.

7. (Canceled)

8. (Currently Amended) The apparatus of claim 7-1 wherein the first elemental device comprises a packet-data interface converter, wherein the first net entity comprises a packet data source, and wherein the prefix structure that identifies the first external port is a configuration parameter.

9. (Canceled)

10. (Currently Amended) The apparatus of claim 3-1 wherein the data sourced at the data source is defined in terms of logical layers, the data formed of at least one lower-level logical layer and at least one higher-level logical layer and wherein the data formatted by said frame encapsulator comprises data formed of the at least one higher-level logical layer.

11. (Currently Amended) The apparatus of claim 3-1 wherein the first elemental device comprises an output port, the connector coupled to output port, wherein the second elemental device comprises an input port, the connector coupled to the input port, and wherein the data frames, once formed by said frame encapsulator is provided to the output port of the first elemental device.

12. (Currently Amended) The apparatus of claim 3-1 wherein an additional data entity is positioned internal to the first elemental device and wherein the prefix structure of the header portion of the data frame formed by said frame encapsulator and comprising data generated by said additional data entity remains unpopulated such that the data frame forms a “not tagged” frame.

13. (Currently Amended) The apparatus of claim 12 further comprising a net entity wherein the first elemental device comprises at least a first external port, wherein the net entity is positioned external to the first elemental device and coupled to the first external port thereof, and wherein the data frame formed by said frame encapsulator is selectably formed of data sourced by the first net entity~~data source~~ and of data sourced by the additional data entity ~~second data source~~.

14. (Original) The apparatus of claim 12 wherein the data sourced at the data entity comprises management data and the data sourced at the net entity comprises payload data and wherein the tag header field is populated with the tag header when the data frame is formed of the data sourced by the net entity.

15. (Currently Amended) The apparatus of claim 3-1 further comprising:
a detector positioned at the second elemental device and coupled to receive indications of the data frame communicated from the first elemental device to the second elemental device, said detector for detecting whether the prefix structure is included as part of the header portion.

16. (Original) The apparatus of claim 15 wherein, when said detector fails to detect the prefix structure to form part of the header portion, the data frame is indicated merely to be received at the first elemental device.

17. (Original) The apparatus of claim 16 wherein the first elemental device

comprises at least a first external port and wherein the first data port is positioned external to the first elemental device and coupled to the first external port thereof, the prefix structure identifying the first external port, and wherein, when said detector detects the prefix structure, said detector further identifies the first data port to be associated with the data frame.

18. (Currently Amended) In a method for communicating at a network element having a first elemental device and at least a second elemental device, the first and at least second elemental devices, respectively, connected together by a connector, an improvement of a method for facilitating communication of data, at least from the first elemental device to the second elemental device, said method comprising:

encapsulating the data to be communicated into a data frame, the data frame having a header portion and a data portion; and

selectably inserting a prefix structure into the header portion;

wherein the prefix structure selectably inserted into the header portion during said operation of selectably inserting comprises a VLAN (Virtual Local Area Network) Identifier (VID); and

wherein the first elemental device comprises at least a first external port and wherein the first data source is positioned external to the first elemental device, coupled to the first external port thereof, said method further comprising the operation of naming the first external port with a first VID, the prefix structure populated with the first VID.

19. (Original) The method of claim 18 further comprising the operations of: communicating the data frame by way of the connector to the second elemental device; and

detecting, once the data frame is delivered to the second elemental device, whether the header portion includes the prefix structure.

20. (Original) The method of claim 18 wherein the prefix structure selectably inserted into the header portion during said operation of selectably inserting comprises a VLAN (Virtual Local Area Network) Identifier (VID).

21. (Canceled)

22. (Canceled)

REMARKS/ARGUMENTS

Claims 1, 5, 6, 8, and 10-20 are currently pending in this application. Claims 2-4, 7, 9, 21 and 22 have been canceled by this Amendment. Claims 1, 5, 8, 10-12, 15 and 18 have been amended by this Amendment.

The Office Action dated April 20, 2006 rejected claim 13 as being indefinite under 35 USC 112, second paragraph, and rejected claims 1-8 and 10-21 as being anticipated by U.S. Patent No. 6,850,495 issued to Baum et al. Applicants gratefully acknowledge the indication that claims 9 and 22 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claim.

Indefiniteness Rejection

The grounds for the rejection of claim 13 as being indefinite under 35 USC 112, second paragraph, is set forth in part 3 on page 3 of the Office Action. Specifically, the claim is rejected on the grounds that is unclear what constitutes the first data source and the second data source. Applicants have changed the phrase “first data source” to “first net entity” and the phrase “second data source” to additional data entr” to clarify the claim. Applicants thus have amended claim 13 in a manner that is believed to overcome the rejection.

Claim Amendments

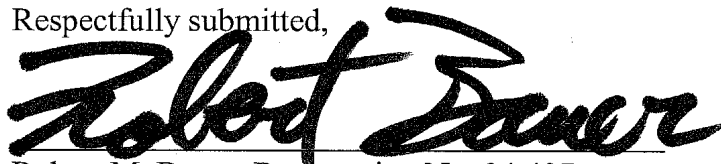
The outstanding office action indicated that original claims 9 and 22 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claim. Applicants have therefore amended independent claims 1 and 18 to include the limitations of allowable original claims 9 and 22. The dependencies of claims 5, 8 10-12 and 15 have been amended in light of the cancelled claims.

Conclusion

Applicants respectfully submit that the currently pending claims, as amended, are allowable for the reasons provided above. A Notice of Allowance is respectfully requested.

The Commissioner is hereby authorized to charge \$120.00 for one-month extension, any fees due in connection with the filing of this Amendment, to Deposit Account No. 10-0100 (Docket. No. NOKIA.1001US), and please credit any overpayment or excess fees to such deposit account.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Robert Bauer", written in a cursive style.

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